

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for checking the existence of an optical disk using a focusing signal, comprising the steps of:

(a) checking whether a focus OK signal is asserted while moving an optical pickup ~~in the direction of the place where an optical disk is placed;~~

(b) ~~starting detection~~ detecting of the a value of focus error if said focus OK signal is asserted, wherein the value of the focus error is obtained by sampling said focus error signal at constant intervals and calculating the sampled values; and

(c) judging the existence of an optical disk, depending upon ~~the a~~ magnitude of the detected value of focus error.

2. (Cancelled)

3. (Currently Amended) The method set forth in claim ~~2~~ 1, wherein in said step (b), said ~~summing~~ calculating is carried out on sampled focus error greater than a predefined reference level.

4. (Currently Amended) The method set forth in claim 1, wherein in said step (c), an optical disk is judged to exist if ~~the magnitude of the~~ detected value of focus error is greater than a predefined reference level.

5. (Currently Amended) A method for checking the existence of an optical disk using a focusing signal, comprising the steps of:

~~(a) examining whether the peak of focus error signal exceeds a predefined reference level, while moving an optical pickup in the direction of the place where an optical disk is placed;~~

~~(b) (a) detecting the magnitude of a focusing focus error signal of which the sign is lower than a predetermined reference level during a predetermined period; opposite to the peak, if confirmed in said step (a); and~~

~~(e) (b) sampling said focus error signal at constant intervals and calculating the sampled values; and~~

~~(c) judging the existence of an optical disk, depending upon the calculated magnitude of detected value.~~

6. (Currently Amended) The method set forth in claim 5, wherein in said the detecting step (b) (a) the detection of the magnitude is carried out by sampling said is started when the focus error signal at constant intervals after the peak is detected and summing the sampled values exceeds a predefined reference level, while moving an optical pickup.

7. (Currently Amended) The method set forth in claim 6, wherein in said step (b) the absolute value of detected level is summed only if the

~~detected level is less than a~~ the predefined reference level includes first and second predefined reference levels, where the first predefined reference level is for starting said detecting step (a) and the second predefined reference level is for detecting the focus error signal.

8. (Currently Amended) The method set forth in claim 5, wherein in said judging step (c), an optical disk is judged to exist if the calculated value magnitude of the focus error signal ~~said detected value~~ is greater than a predefined value ~~reference level~~.

9. (Currently Amended) A method for checking the existence of an optical disk using a focusing signal, comprising:

detecting the a magnitude of a focus error signal of which the level is less than a predefined reference level; and, wherein the magnitude of the focus error signal is obtained by sampling said focus error signal at constant intervals and calculating the sampled values; and

judging the existence of an optical disk, depending upon the magnitude of ~~detected value~~ the focus error signal.

10. (New) The method set forth in claim 1, wherein the calculating involves summing the sampled values.

11. (New) The method set forth in claim 5, wherein the calculating involves summing the sampled values.

12. (New) The method set forth in claim 7, wherein the first predefined reference level is higher than the second predefined reference level.

13. (New) The method set forth in claim 1, wherein in said step (a), the focus OK signal is asserted based on a result of comparing a beam strength signal and a reference signal.

14. (New) The method set forth in claim 5, wherein said step (a) is preformed if a focus OK signal is asserted.

15. (New) The method set forth in claim 14, wherein the focus OK signal is asserted based on a result of the comparing a beam strength signal and a reference signal.

16. (New) The method set forth in claim 9, wherein said detecting step is preformed if a focus OK signal is asserted.

17. (New) The method set forth in claim 16, wherein the focus OK signal is asserted based on a result of the comparing a beam strength signal and a reference signal.

18. (New) The method set forth in claim 9, wherein the calculating involves summing the sampled values.

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